

MCH Data Brief

March 2013

Kentucky Department for Public Health, Division of Maternal & Child Health

Preterm Birth

Preterm birth (a live birth occurring <37 completed weeks gestation) has been an increasing problem both in the Nation and in Kentucky.

Infant mortality rates are substantially higher for preterm and low birth weight infants, and even limited changes in the percentages of preterm or low birth weight infants can have a major impact on infant mortality rates. ¹ Preterm related causes of death are the leading cause of infant mortality in Kentucky and the nation accounting for 35.4% of total infant deaths. ² Even babies born just a few weeks early, called late preterm infants (34 0/7-36 6/7weeks gestation) are three times more likely to die in the first year of life compared to term infants, and are also twice as likely to die of SIDS than term infants. ³

Risks for Preterm babies:

Chronic lung disease

Blindness/Hearing impairment

Cerebral palsy

Developmental delay

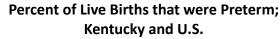
Behavior and Learning Problems

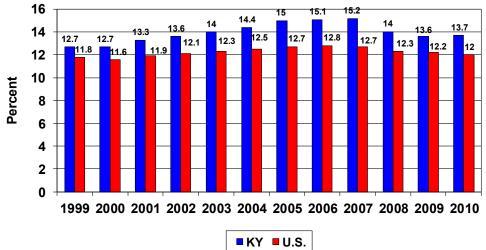
Long-term Disability

Preterm Birth Among Infants in Kentucky

Preterm birth in Kentucky has increased 8% over the past decade from 12.7% in 1999 to 13.7% in 2010 with rates climbing as high as 15.2%. In the first half of the decade, rates of preterm birth increased nearly 20% in Kentucky compared to only an 8% increase in the U.S. The rate of preterm birth has only begun to decline in the last three years in Kentucky after reaching it's peak in 2007. Nationally, rates of preterm birth have increased over the same time period as well but not as high or as fast as the Kentucky rate. The preterm birth rate for the U.S. has also been declining over the last three years after reaching a high of 12.8% in 2006.

Babies born preterm are at an increased risk for life-long complications such as visual and hearing impairments, developmental delays, and behavior/emotional problems which can range from mild to severe. Preterm birth not only poses several risks to the infant but is also a huge cost to society in terms of direct and indirect medical costs. Prematurity may result in long-term physical and mental disabilities, which generate additional costs compared to children born full term. On average, first year medical costs including both inpatient and outpatient care were 10 times greater for preterm (\$32,325) than for term infants (\$3,325).





Can Preterm Birth Be Prevented?

Yes, it can. What we have learned in recent years, is that preterm birth should be treated like a public health problem, with interventions at all levels in a community, not just approached from as a medical care issue. Providing comprehensive services that integrate evidence-based and best practices in clinical care with a system of social and environmental supports have shown great promise in reducing rates of preterm birth. The KY Healthy Babies are Worth the Wait project worked from this ecological model and reduced rates of preterm birth in the intervention communities by 15%. We do not have all the information we need to prevent preterm birth, but we know enough now to do better. We have to take a broader approach and improve our systems of care and support for pregnant women and their infants.



PREMATURITY PREVENTION STRATEGIES THAT WORK

National Examples

Strong Start new models of care Pregnancy Medical Homes Perinatal Quality Collaboratives Federal Healthy Start Smoking Cessation Kentucky Examples
HANDS Home Visiting
Healthy Babies are Worth the Wait
Centering Pregnancy projects
KY Healthy Start Sites
Smoke Free Ordinances

The ASTHO President's Challenge

Based in part on KY's success with reducing preterm birth in Healthy Babies are Worth the Wait, State Health Officers from the southern states decided to take on Preterm Birth as a public health initiative. Dr. David Lakey from Texas, as the president of ASTHO in 2012, challenged all state health officers to commit to improve birth outcomes by reducing infant mortality and prematurity in the United States. His challenge, the Healthy Babies Initiative, has a specific goal to reduce prematurity in the U.S. by 8% by 2014. Kentucky is one of 49 states who have signed on to the ASTHO President's Challenge. ASTHO has collaborated with the Maternal and Child Health Bureau of HRSA, the Association of Maternal and Child Health Programs, the March of Dimes, the Centers for Disease Control and Prevention, and other partners to develop this national initiative.

PREMATURITY PREVENTION

Encourage a preconception health visit prior to pregnancy, early and regular prenatal care visits

Improve access to health care, mental health, and substance abuse services for women.

Provide comprehensive, evidence based care that Includes psychosocial screening and supports for pregnant women

Reduce early elective deliveries; Educate pregnant women on the importance of carrying their baby to full term

References:

- 1. Morbidity and Mortality Weekly Report; 60:50, 2011
- 2. Matthews TJ, MacDorman M. Infant Mortality Statistics from the 2009 Period Linked Birth/Infant Death Dataset. National vital statistics reports; vol 61 no 8. Hyatts-ville. MD: National Center for Health Statistics. January 2013.
- 3. Tomashek, KM, Shapiro-Mendose CK, Davidoff MJ, Petrini JR. Differences in Mortality between Late-Preterm and Term Singleton Infants in the United States, 1995-2002. J Pediatr 2007:151:450-6
- March of Dimes Data Book for Policy Makers; Maternal, Infant, and Child Health in the United States, 2008

Data Source:

March of Dimes, Peristats-Preterm birth indicator, comparison of Kentucky to the U.S.; Years 1999-2010